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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 3

Complete if Known	
Application Number	10/699512
Filing Date	October 31, 2003
First Named Inventor	George Nelson Bennett
Art Unit	N/A
Examiner Name	Not Yet Assigned
Attorney Docket Number	61683-00003USPT

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]-Number[4]-Kind Code[5] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]

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NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
JF	CA	Martinez-Morales, F., et al., Chromosomal integration of heterologous DNA in Escherichia coli with precise removal of markers and replicons used during construction. J Bacteriol, 1999. 181(22): p. 7143-8.	
	CB	Koob, M.D., et al., Minimizing the genome of Escherichia coli. Motivation and strategy. Ann N Y Acad Sci, 1994. 745: p. 1-3.	
	CC	Peredelchuk, M.Y. and G.N. Bennett, A method for construction of E. coli strains with multiple DNA insertions in the chromosome. Gene, 1997. 187(2): p. 231-8.	
	CD	Lorbach, E., et al., Site-specific recombination in human cells catalyzed by phage lambda integrase mutants. J Mol Biol, 2000. 296(5): p. 1175-81.	
	CE	Cherepanov, P.P. and W. Wackernagel, Gene disruption in Escherichia coli: TcR and KmR cassettes with the option of Flp-catalyzed excision of the antibiotic-resistance determinant.Gene, 1995. 158(1): p. 9-14.	
	CF	Chiang, S.L. and J.J. Mekalanos, Construction of a Vibrio cholerae vaccine candidate using transposon delivery and FLP recombinase-mediated excision. Infect Immun, 2000. 68(11): p. 6391-7.	
	CG	Tsuda, M., Use of a transposon-encoded site-specific resolution system for construction of large and defined deletion mutations in bacterial chromosome. Gene, 1998. 207(1): p. 33-41.	
	CH	Dale, E.C. and D.W. Ow, Gene transfer with subsequent removal of the selection gene from the host genome. Proc Natl Acad Sci U S A, 1991. 88(23): p. 10558-62.	
	CI	Delneri, D., et al., Exploring redundancy in the yeast genome: an improved strategy for use of the cre-loxP system. Gene, 2000. 252(1-2): p. 127-35.	
	CJ	Palmeros, B., et al., A family of removable cassettes designed to obtain antibiotic- resistance-free genomic modifications of Escherichia coli and other bacteria. Gene, 2000. 247(1-2): p. 255-64.	
↓	CK	Mao, X., Y. Fujiwara, and S.H. Orkin, Improved reporter strain for monitoring Cre recombinase-mediated DNA excisions in mice. Proc Natl Acad Sci U S A, 1999. 96(9): p. 5037 42.	
JF	CL	Caparon, M.G. and J.R. Scott, Excision and insertion of the conjugative transposon Tn916	

Examiner Signature	/Jeffrey Fredman/	Date Considered	04/26/2006

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Art Unit	N/A
Examiner Name	Not Yet Assigned
Attorney Docket Number	61683-00003USPT

JF		involves a novel recombination mechanism. Cell, 1989. 59(6): p. 1027-34.	
JF	CM	Storrs, M.J., et al., Conjugative transposition of Tn916 requires the excisive and integrative activities of the transposon-encoded integrase. J Bacteriol, 1991. 173(14): p. 4347-52.	
	CN	Manganelli, R., S. Ricci, and G. Pozzi, Conjugative transposon Tn916: evidence for excision with formation of 5'-protruding termini. J Bacteriol, 1996. 178(19): p. 5813-6.	
	CO	Rudy, C., et al., Excision of a conjugative transposon in vitro by the Int and Xis proteins of Tn916. Nucleic Acids Res, 1997. 25(20): p. 4061-6.	
	CP	Connolly, K.M., M. Iwahara, and R.T. Clubb, Xis protein binding to the left arm stimulates excision of conjugative transposon Tn916. J Bacteriol, 2002. 184(8): p. 2088-99.	
	CQ	Platt, R., et al., Genetic system for reversible integration of DNA constructs and lacZ gene fusions into the Escherichia coli chromosome. Plasmid, 2000. 43(1): p. 12-23.	
	CR	Kim, S.Y., et al., Modification of bacterial artificial chromosome clones using Cre recombinase: introduction of selectable markers for expression in eukaryotic cells. Genome Res, 1998. 8(4): p. 404-12.	
	CS	Golic, M.M., et al., FLP-mediated DNA mobilization to specific target sites in Drosophila chromosomes. Nucleic Acids Res, 1997. 25(18): p. 3665-71.	
	CT	Christ, N., T. Corona, and P. Droge, Site-specific recombination in eukaryotic cells mediated by mutant lambda integrases: implications for synaptic complex formation and the reactivity of episomal DNA segments. J Mol Biol, 2002. 319(2): p. 305-14.	
	CU	Call, L.M., et al., A cre-lox recombination system for the targeted integration of circular yeast artificial chromosomes into embryonic stem cells. Hum Mol Genet, 2000. 9(12): p. 1745-51.	
	CV	Feng, Y.Q., et al., Site-specific chromosomal integration in mammalian cells: highly efficient CRE recombinase-mediated cassette exchange. J Mol Biol, 1999. 292(4): p. 779-85.	
	CW	Thyagarajan, B., et al., Mammalian genomes contain active recombinase recognition sites. Gene, 2000. 244(1-2): p. 47-54.	
	CX	Diaz, V., et al., The prokaryotic beta-recombinase catalyzes site-specific recombination in mammalian cells. J Biol Chem, 1999. 274(10): p. 6634-40.	
	CY	Olivares, E.C., R.P. Hollis, and M.P. Calos, Phage R4 integrase mediates site-specific integration in human cells. Gene, 2001. 278(1-2): p. 167-76.	
	CZ	Moskowitz, I.P., K.A. Heichman, and R.C. Johnson, Alignment of recombination sites in Hin-mediated site-specific DNA recombination. Genes Dev, 1991. 5(9): p. 1635-45.	
	CA1	Haykinson, M.J., et al., The Hin dimer interface is critical for Fis-mediated activation of the catalytic steps of site-specific DNA inversion. Curr Biol, 1996. 6(2): p. 163-77.	
	CB1	Merickel, S.K., M.J. Haykinson, and R.C. Johnson, Communication between Hin recombinase and Fis regulatory subunits during coordinate activation of Hin-catalyzed site-specific DNA inversion. Genes Dev, 1998. 12(17): p. 2803-16.	
	CC1	Stark, W.M., M.R. Boocock, and D.J. Sherratt, Site-specific recombination by Tn3 resolvase. Trends Genet, 1989. 5(9): p. 304-9.	
	CD1	Arnold, P.H., et al., Mutants of Tn3 resolvase which do not require accessory binding sites for recombination activity. Embo J, 1999. 18(5): p. 1407-14.	
	CE1	Canosa, I., et al., Site-specific recombination by the beta protein from the streptococcal plasmid pSM19035: minimal recombination sequences and crossing over site. Nucleic Acids Res, 1996. 24(14): p. 2712-7.	
	CF1	Canosa, I., et al., beta Recombinase catalyzes inversion and resolution between two inversely oriented six sites on a supercoiled DNA substrate and only inversion on relaxed or linear substrates. J Biol Chem, 1998. 273(22): p. 13886-91.	
	CG1	Muyrers, J.P., et al., Point mutation of bacterial artificial chromosomes by ET recombination. EMBO Rep, 2000. 1(3): p. 239-43.	
	CH1	Muyrers, J.P., et al., Rapid modification of bacterial artificial chromosomes by ET-recombination. Nucleic Acids Res, 1999. 27(6): p. 1555-7.	
JF	CI1	Yoon, Y.G., J.H. Cho, and S.C. Kim, Cre/loxP-mediated excision and amplification of large	

Examiner Signature	/Jeffrey Fredman/	Date Considered	04/26/2006

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Art Unit	N/A
Examiner Name	Not Yet Assigned
Attorney Docket Number	61683-00003USPT

JF		segments of the Escherichia coli genome. Genet Anal, 1998. 14(3): p. 89-95.	
	CJ1	Cheng, T.H., et al., Controlling gene expression in yeast by inducible site-specific recombination. Nucleic Acids Res, 2000. 28(24): p. E108.	
	CK1	Choi, S., et al., A new approach for the identification and cloning of genes: the pBACwich system using Cre/lox site-specific recombination. Nucleic Acids Res, 2000. 28(7): p. E19.	
	CL1	Sclimenti, C.R., B. Thyagarajan, and M.P. Calos, Directed evolution of a recombinase for improved genomic integration at a native human sequence. Nucleic Acids Res, 2001. 29(24): p. 5044-51.	
	CM1	Johnson, R.C., Bacterial Site-Specific DNA Inversion Systems, in Mobile DNA II, N.L. Craig, Craigie, R., Gellert, M., Lambowitz. A. M., Editor. 2002, ASM Press: Washington, D.C. p. 230-271.	
	CN1	Grindley, N.D.F., The Movement of Tn3-Like Elements: Transposition and Cointegrate Resolution, in Mobile DNA II, N.L. Craig, Craigie, R., Gellert, M., Lambowitz. A. M., Editor. 2002. p 272-302.	
	CO1	Posfai, G., et al., In vivo excision and amplification of large segments of the Escherichia coli genome. Nucleic Acids Res, 1994. 22(12): p. 2392-8.	
	CP1	Buchholz, F., P.O. Angrand, and A.F. Stewart, Improved properties ofFLP recombinase evolved by cycling mutagenesis. Nat Biotechnol, 1998. 16(7): p. 657-62.	
	CQ1	Scott, J.R., et al., Conjugative transposition of Tn916: preferred targets and evidence for conjugative transfer of a single strand and for a double-stranded circular intermediate. Mol Microbiol, 1994. 11(6): p. 1099-108.	
	CR1	Poyart-Salmeron, C., et al., The integration-excision system of the conjugative transposon Tn 1545 is structurally and functionally related to those of lambdoid phages. Mol Microbiol, 1990. 4(9): p. 1513-21.	
	CS1	Trieu-Cuot, P., et al., Sequence requirements for target activity in site-specific recombination mediated by the Int protein of transposon Tn 1545. Mol Microbiol, 1993. 8(1): p. 179-85.	
	CT1	Sauer, B. and N. Henderson, Targeted insertion of exogenous DNA into the eukaryotic genome by the Cre recombinase. New Biol, 1990. 2(5): p. 441-9.	
	CU1	Johnson, R.C., Mechanism of site-specific DNA inversion in bacteria. Curr Opin Genet Dev, 1991. 1(3): p. 404-11.	
	CV1	Rojo, F. and J.C. Alonso, The beta recombinase of plasmid pSM19035 binds to two adjacent sites, making different contacts at each of them. Nucleic Acids Res, 1995. 23(16): p. 3181-8.	
JF	CW1	Huang, L.C., E.A. Wood, and M.M. Cox, A bacterial model system for chromosomal targeting. Nucleic Acids Res, 1991. 19(3): p. 443-8.	

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